(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization

International Bureau





(43) International Publication Date 30 September 2004 (30.09.2004)

PCT

(10) International Publication Number WO 2004/084296 A1

(51) International Patent Classification7:

H01L 21/66

(21) International Application Number:

PCT/KR2004/000560

- (22) International Filing Date: 16 March 2004 (16.03.2004)
- (25) Filing Language:

Korean

(26) Publication Language:

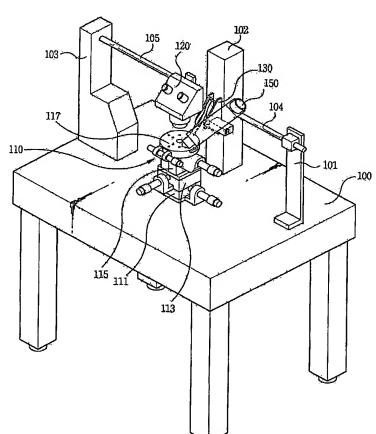
English

- (30) Priority Data: 10-2003-0016635 17 March 2003 (17.03.2003)
- (71) Applicant (for all designated States except US): PH-ICOM CORPORATION [KR/KR]; 60-29 Gasan-dong, Kumchon-gu, Seoul 153-801 (KR).
- (71) Applicant and
- (72) Inventor: LEE, Oug-Ki [KR/KR]; A/12 Green Villa, 1-5, Hang-dong, Guro-gu, Seoul 152-140 (KR).

- (72) Inventor; and
- (75) Inventor/Applicant (for US only): LEE, Jung-Hoon [KR/KR]; 1315-1402 Dongpaik Woosung APT., 1059 Sanbon-2-dong, Kunpo-shi, Gyeonggi-do 435-849 (KR).
- (74) Agent: KIM, Inhan; 5th floor, Daerim Bldg., 1695-4 Seocho-dong, Seocho-gu, Seoul 137-883 (KR).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH,

[Continued on next page]

(54) Title: PROBE POSITIONING AND BONDING DEVICE AND PROBE BONDING METHOD



(57) Abstract: Disclosed herein are a probe positioning and bonding device and a probe bonding method, and more particularly a probe positioning and bonding device used to fix probes to prescribed positions on a substrate so that a probe card used for semiconductor integrated circuit testing equipment is manufactured, and a probe bonding method using the same. The probe positioning and bonding device comprises a stage unit disposed on a working table, a microscope disposed above the stage unit while being supported by means of a first supporting member disposed on the working table, a probe fixing unit disposed above the stage unit and below the microscope while being supported by means of a second supporting member disposed on the working table, and a light source unit supported by means of a third supporting member disposed on the working table. The light source unit is disposed toward the upper part of the stage unit.

WO 2004/084296 A1

T CORRES DEVIATOR HE CORRES STOTE CORRES CORRES CORRES FOR HE CORRES COR

GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.